

Listing of Claims

Claims 1 - 57-(Cancelled)

- 58. A medical diagnostic display for providing an integrated and three-dimensional representation of a patient's physiological data for diagnostic purposes, comprising:

 a plurality of cardiac objects configured to depict a patient's cardiac status as compared to time;
 - a respiration object configured to display a patient's respiration status as compared to time, the respiration object being displayed in combination with the plurality of cardiac objects to exhibit interaction between respiration and cardiovascular states of the patient.
- 59. A medical diagnostic display as in claim 58, further comprising a normalization gridframe which represents expected normal values for cardiac output and heart rate, the normalization gridframe being overlaid by the plurality of cardiac objects.
- 60. A medical diagnostic display as in claim 59, wherein the normalization gridframe further comprises an upper blood pressure limit and lower blood pressure limit as a reference for the plurality of cardiac objects.
- 61. A medical diagnostic display as in claim 58, wherein the plurality of cardiac objects include an object height that is proportional to a heart's volume output and an object width proportional to heart rate.
- 62. A medical diagnostic display as in claim 58, wherein the respiration object includes a height proportional to tidal volume and a width proportional to respiratory rate.

- 63. A medical diagnostic display as in claim 58, wherein the respiration object includes colors displayed in the respiration object representing pre-defined concentrations of respiratory gases.
- 64. A medical diagnostic display as in claim 58, wherein the plurality of cardiac objects include an object elevation representing mean blood pressure.
- 65. A medical diagnostic display as in claim 58, further comprising an arrangement of a time scale from right to left with current conditions layered at a front right edge of the time scale.
- 66. A medical diagnostic display as in claim 58, wherein the plurality of cardiac objects and respiration object display a plurality of health states over time.
- 67. A medical diagnostic display as in claim 58, wherein the plurality of cardiac objects further comprises at least two bars penetrating the plurality of cardiac objects, the at least two bars each having a length representing systolic pressure or diastolic pressure.
- 68. A medical diagnostic display for providing an integrated, three-dimensional view of patient physiological data for diagnostic purposes, comprising:
 - a respiration curtain configured to display a patient's respiration status over a predetermined time period;
 - a plurality of eardiac objects configured to display a patient's cardiac status over a predetermined time period, wherein the cardiac objects are layered over the respiration curtain to display a relationship between a patient's respiration and cardiovascular status; and
 - a normalization gridframe that displays expected normal values for cardiac stroke volume and heart rate and is overlaid by the plurality of cardiac objects.
- 69, A modical diagnostic display as in claim 67, further comprising a plurality of colors in the respiration configured to display concentrations of respiratory gases.

- 70. A medical diagnostic display as in claim 67, further comprising a plurality of colors applied to the plurality of cardiae objects configured to display gas concentrations in blood.
- 71.48 inclined for organizing a plurality of diagnostic patient physiological data in a three-dimensional display, comprising the steps of:

providing at least one cardiac object that grows and shrinks with each heartbeat;

is displaying the cardiac object with a volume proportional to a heart's stroke volume and a width proportional to a heart rate;

providing a gridframe with expected normal values for stroke volume and heart rate and the at least one cardiac object's position with respect to the gridframe is proportional to a patient's blood pressure;

locating a respiration curtain behind the at least one cardiac object, the respiration curtain having colors displaying concentrations of respiratory gases; and

depicting a patient's respiratory tidal volume with a height of the respiration curtain.

- 72. A medical diagnostic display for providing an integrated representation of a patient's physiological data for diagnostic purposes, comprising:
 - a plurality of cardiac objects configured to change in volume and height to represent a patient's cardiac state over time;
 - if a respiration curtain configured to change in height and color, the respiration curtain being displayed in combination with the plurality of cardiac objects to exhibit interactions between the patient's respiration and cardiovascular state; and
 - a normalization gridframe configured to display the expected normal values for cardiac shoke volume, the normalization gridframe being overlaid by the plurality of cardiac objects.

73. A medical diagnostic display for providing an integrated, three-dimensional view of patient physiological data for diagnostic purposes, comprising:

a normalization gridframe configured to display expected normal values for cardiac stroke volume and heart rate;

a plurality of cardiac objects configured to display a patient's cardiac status over a predetermined time period, wherein the cardiac objects are layered over the normalization gridframe; and

at least two physiological eardiac sensor measurements that are displayed with the plurality of cardiac objects using geometric dimensions and spatial positioning of the plurality cardiac objects.

74. A medical diagnostic display for providing an integrated, three-dimensional view of patient physiological data for diagnostic purposes, comprising:

a respiration curtain configured to display a patient's respiration status over a predetermined time period;

at least two physiological respiration sensor measurements that are displayed with the respiration curtain using geometric dimensions and spatial positioning of the respiration curtain; and

a normalization gridframe that displays expected normal values for respiration and provides a reference for the respiration curtain.

